Archean Biosphere Drilling Project (ABDP)
Core Data Sharing: Web Interface

Alice I. Klarke
Penn State Astrobiology Research Center
The Pennsylvania State University
435 Deike Building, University Park PA 16802
U.S.A.
aklarke@geosc.psu.edu

David C. Bevacqua
Penn State Astrobiology Research Center
The Pennsylvania State University
435 Deike Building, University Park PA 16802
U.S.A.

Hiroshi Ohmoto
Penn State Astrobiology Research Center
The Pennsylvania State University
435 Deike Building, University Park PA 16802
U.S.A.

Image and analysis data are provided online from the Summer 2003 Archean Biosphere Drilling Project (ABDP), a project under NAI's Astrobiology Drilling Program (ADP).

The main objectives of the ABDP were to recover unweathered Archean rocks (mostly sedimentary rocks 3.56 - 2.7 Ga in age) from the Pilbara district, Western Australia for systematic paleontological and biogeochemical investigations. Specific geologic formations were targeted, ideal for studies designed to answer specific questions (e.g., the time of emergence and distribution of cyanobacteria, eukarya, sulfate reducers, and other organisms; the mechanisms for the creation of mass independent fractionation (MIF) of sulfur isotopes.

Reasons/purposes for creating the website:

1. To invite scientists to conduct various types of research on the drill cores,
2. To disseminate the results of scientific investigations on these cores.

Core photos and data analysis are linked with standard graphic depictions of strata and geology to make data retrieval intuitive and easy. The linking architecture of web pages lends itself to, a) direct navigation to the data of interest, and, b) 3-D spatial pathways from surface features to associated drilled core data. One goal is to provide a web template for data publication from similar projects.